

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing of claims in the application:

Claim 1 (Currently amended): ~~[[An]]~~ A bovine adenovirus vector comprising an intron and a heterologous transgene wherein said intron is located 5' to the heterologous transgene, and wherein said vector is capable of expressing greater levels of the heterologous transgene than a comparable bovine adenovirus vector comprising ~~[[a]]~~ the heterologous transgene and lacking an intron 5' to said heterologous transgene.

Claims 2-4 (Canceled)

Claim 5 (Currently amended): The adenovirus vector of claim ~~[[4]]~~ 1, wherein said bovine adenovirus vector is a member of subgroup 1 bovine adenovirus or subgroup 2 bovine adenovirus.

Claim 6 (Currently amended): The adenovirus vector of claim ~~[[4]]~~ 5, wherein said bovine adenovirus vector is BAV3.

Claim 7 (Original): The adenovirus vector of claim 1, wherein said transgene encodes a eucaryotic or procaryotic protein.

Claim 8 (Currently amended): The adenovirus vector of claim ~~[[7]]~~ 1 wherein said transgene encodes ~~a therapeutic protein or polypeptide; a growth hormone or other growth enhancer; or a protein capable of eliciting an immune response.~~

Claim 9 (Withdrawn): The adenovirus vector of claim 7, wherein said transgene encodes a protein from a pathogen.

Claim 10 (Currently amended): The adenovirus vector of claim ~~[[9]]~~ 1, wherein said transgene encodes ~~protein is an~~ RNA viral protein.

Claim 11 (Currently amended): The adenovirus vector of claim [[9]] 1 wherein said transgene encodes protein is a DNA viral protein.

Claim 12 (Withdrawn): The adenovirus vector of claim 9, wherein said protein is a bacterial protein.

Claim 13. (Withdrawn): The adenovirus vector of claim 9, wherein said protein is a protein from a parasite.

Claim 14 (Original): The adenovirus vector of claim 1, wherein said intron is a mammalian intron.

Claim 15 (Original): The adenovirus vector of claim 1, wherein said transgene is operably linked to a control region and said intron is located 3' to said control region.

Claim 16 (Original): The adenovirus vector of claim 1, wherein said vector is replication-competent.

Claim 17 (Original): The adenovirus vector of claim 1, wherein said vector is replication-defective.

Claim 18 (Original): A composition comprising a vector according to claim 1.

Claim 19 (Original): The composition of claim 18 further comprising a pharmaceutically acceptable excipient.

Claim 20 (Original): A host cell comprising the vector of claim 1.

Claim 21 (Original): A recombinant adenovirus comprising the vector of claim 1.

Claim 22 (Withdrawn): A method of preparing an adenovirus vector comprising an intron and a heterologous transgene wherein said intron is located 5' to said heterologous transgene,

said method comprising the steps of obtaining an adenovirus vector and inserting a transgene and an intron into said vector, wherein said intron is inserted 5' to said heterologous transgene.

Claim 23 (Withdrawn): The method of claim 22 wherein said adenovirus vector has a deletion in a gene essential for replication.

Claim 24 (Withdrawn): The method of claim 23 wherein said gene essential for replication is E1.

Claim 25 (Withdrawn): A method of preparing an adenovirus comprising the adenovirus vector of claim 1, comprising the steps of culturing a mammalian host cell comprising the adenovirus vector of claim 1 under conditions suitable for adenovirus replication and packaging; and optionally recovering said adenovirus produced.

Claim 26 (Withdrawn): The method according to claim 25 wherein said adenovirus has a deletion in a gene essential for replication and said method further comprises the step of culturing said mammalian host cell in the presence of a helper cell line which comprises said gene essential for replication.

Claim 27 (Withdrawn): The method of claim 26 wherein said gene essential for replication is E1.

Claim 28 (Withdrawn): An immunogenic composition comprising an adenovirus vector of claim 9.

Claim 29 (Original): An immunogenic composition comprising an adenovirus vector of claim 10.

Claim 30 (Original): An immunogenic composition comprising an adenovirus vector of claim 11.

Claim 31 (Withdrawn): An immunogenic composition comprising an adenovirus vector of claim 12.

Claim 32 (Withdrawn): An immunogenic composition comprising an adenovirus vector of claim 13.

Claim 33 (Withdrawn): A composition capable of inducing an immune response in a mammalian subject, said composition comprising the immunogenic composition of claim 28.

Claim 34 (Withdrawn): The composition according to claim 33 further comprising a pharmaceutically acceptable excipient.

Claim 35 (Withdrawn): A method of treating or ameliorating the symptoms of a RNA viral infection in a mammalian host comprising administering to said host a therapeutically effective amount of the immunogenic composition of claim 29.

Claim 36 (Withdrawn): A method of treating or ameliorating the symptoms of a DNA viral infection in a mammalian host comprising administering to said host a therapeutically effective amount of the immunogenic composition of claim 30.

Claim 37 (Withdrawn): A method of treating or ameliorating the symptoms of a bacterial infection in a mammalian host comprising administering to said host a therapeutically effective amount of the immunogenic composition of claim 31.

Claim 38 (Withdrawn): A method of treating or ameliorating the symptoms of a parasitic infection in a mammalian host comprising administering to said host a therapeutically effective amount of the immunogenic composition of claim 32.

Claim 39 (New): The adenovirus of claim 1 wherein said transgene comprises a splice junction sequence.

Claim 40 (New): The adenovirus of claim 1 wherein said intron is a hybrid intron.